

CLAIMS

1. An optical recording medium, characterized by comprising:

5 a data recording layer on which contents data is recorded by irradiation of an optical beam, and

a visual information recording layer on which visual information, which is visually recognized and indicative of information regarding the contents of the contents data, is
10 recorded by irradiation of the optical beam,

wherein the data recording layer and the visual information recording layer are laminated.

2. The optical recording medium according to claim 1,
15 characterized in that

the visual information is visually recognized from a surface different from a data recording surface, which is a surface through which the data recording layer is irradiated with the optical beam, and is recorded on the visual information
20 recording layer by irradiation of the optical beam.

3. The optical recording medium according to claim 1 or 2, characterized in that

the visual information is recorded on the visual
25 information recording layer by irradiation of the optical beam from the surface different from the data recording surface.

4. The optical recording medium according to any one of claims 1 to 3, characterized in that

the data recording layer is provided on a first substrate, and the visual information area is provided on a second
5 substrate.

5. The optical recording medium according to any one of claims 1 to 4, characterized in that

the visual information recording layer has a visual
10 information area for recording the visual information, and a visual information management area wherein at least one of recording layer information indicative that the recording layer is the visual information recording layer, recording management information indicative of presence or absence of
15 a record of the visual information, an area information indicative of a recordable area of visual information, and contents information indicative of the contents of the visual information are recorded.

20 6. The optical recording medium according to any one of claims 1 to 5, characterized in that

the visual information recording layer has a visual information area on which the recording layer information indicative that the recording layer is the visual information
25 recording layer is regularly recorded.

7. The optical recording medium according to any one of

claims 1 to 6, characterized in that

the data recording layer has a data recording area for recording the contents data, and a data management area wherein at least one of the recording layer information indicative that the recording layer is the data recording layer, and a recording medium information indicative that the visual information recording layer is provided on the optical recording medium is recorded.

8. The optical recording medium according to claim 7, characterized in that

the data recording layer has the data management area wherein at least one of a recording management information indicative of the presence or absence of the record of the visual information and a area information indicative of the recordable area for visual information is recorded.

9. A data recording apparatus that records visual information onto an optical recording medium formed by lamination of a data recording layer onto which contents data is recorded, and a visual information recording layer on which visual information which is visually recognized and indicative of information regarding the contents of the contents data is recorded, the data recording apparatus being characterized by comprising:

an interface that is received the visual information to be recorded;

a pickup that is used to record the received visual information; and

a visual-information dedicated drive signal generating device that generates a visual-information dedicated drive signal for driving the pickup in accordance with the received visual information,

wherein the pickup records the visual information onto the visual information recording layer in accordance with the generated visual-information dedicated drive signal.

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10. The data recording apparatus according to claim 9, when the contents data is input into the interface and the pickup records the contents data onto the data recording layer, comprising:

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a contents-data dedicated drive signal generating device that generates a contents-data dedicated drive signal for driving the pickup in accordance with the received contents data; and

a selecting device that selects one of the generated contents-data dedicated drive signal and the visual-information dedicated drive signal generated by the visual-information dedicated drive signal generating device,

wherein, when the contents-data dedicated drive signal is selected, the pickup records the contents data onto the data recording layer in accordance with the selected contents-data dedicated drive signal; and when the visual-information dedicated drive signal is selected, the

pickup records the contents data onto the data recording layer in accordance with the selected visual-information dedicated drive signal.

- 5 11. The data recording apparatus according to claim 9, when the contents data is input into the interface, comprising:
- a contents-data dedicated drive signal generating device that, generates a contents-data dedicated drive signal for driving the pickup in accordance with the received contents
 - 10 data; and
 - a data recording pickup that is different from a visual-information recording pickup which is the pickup for recording the visual information and that records the contents data onto the data recording layer in accordance with the
 - 15 contents-data dedicated drive signal generated by the contents-data dedicated drive signal.

12. The data recording apparatus according to claim 11, characterized in that the visual-information recording pickup
- 20 records the visual information with a diameter of an optical beam that is greater than a diameter of an optical beams generated by the data recording pickup.

13. The data recording apparatus according to claim 12,
- 25 characterized in that the visual-information recording pickup has a NA (numerical aperture) lower than that of the data recording pickup.

14. The data recording apparatus according to claim 12,
characterized in that the visual-information recording pickup
emanates an optical beam having a longer wavelength than the
5 data recording pickup.

15. The data recording layer according to any one of claims
10 to 14, in the case that the visual information is recorded
by irradiation of the optical beam from the surface different
10 from the data recording surface, and the optical recording
medium includes a visual information recording layer having
at least one of a recording management area wherein at least
recording layer information indicative that the recording
layer is the visual information recording layer, and a visual
15 information area wherein the visual information and recording
layer information indicative that the recording layer is the
visual information recording area, characterized by
comprising:

a detecting device that detects at least one of the
20 recording layer information recorded in the recording
management area of the visual information recording layer and
the recording layer information recorded in the visual
information area of the visual information recording layer;
and

25 a determining device that determines an irradiation
surface of the optical recording medium being irradiated with
the optical beam in accordance with the detection result of

the detecting device.

16. The data recording apparatus according to claim 15, in the case that the optical recording medium includes the visual information recording layer wherein the visual information is recorded by irradiation of the optical beam from the surface different from the data recording surface, and the data recording layer having the data management area wherein at least the recording layer information indicative that the recording layer is the data recording layer, characterized by comprising:

a detecting device that detects the recording layer information recorded in the data management area of the data recording layer; and

15 a determining device that determines an irradiation surface of the optical recording medium being irradiated with the optical beam in accordance with the detection result of the detecting device.